

Surface Energy Probe

Abstract

A method and an apparatus for detecting relative changes in the surface energy of a test
5 surface by adhering a tacky sampling surface to the test surface and removing the tacky
sampling surface from the test surface while measuring the force and speed of removal.
The measured force and speed of removal is used to compute a relative surface energy,
which is compared to a standard value for that surface. This technique has utility for
monitoring the cleanliness of surfaces in printing, adhesive and paint application, display
10 and semiconductor fabrication, and generally test surfaces requiring cleanliness and
which cannot readily be transported to or configured for an existing surface analysis
technique.